

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

I am the Applicant for
Yuichi Iikubo
Serial No.: 09/966,158
Filed: September 28, 2001

) Group: 1764

) Examiner:

)
)
)
)
) Title: MATERIALS AND METHODS FOR THE
) PRODUCTION AND PURIFICATION OF
) CHLOROFLUOROCARBONS AND
) HYDROFLUOROCARBONS

) February 11, 2002

RECEIVED
MAR 05 2002
TC 1700

INFORMATION DISCLOSURE STATEMENT

BOX PATENT APPLICATION
Commissioner for Patents
Washington, D.C. 20231

Sir:

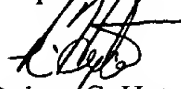
Applicant wishes to bring to the attention of the Examiner the documents identified on the attached form PTO/SB/08A-B. Applicants respectfully request that these documents be made of record in the present application.

Only one of the identified documents is not in English. This particular document is EP 0 539 989 A1. In compliance with 37 CFR 1.98(a)(3), the applicant submits the following concise explanation and translation of EP 0 539 989 A1 as provided by the SciFinder database:

CF₃CHFCCF₃ was prepared by hydrodechlorination of
CF₃CClFCF₃ (I) using the catalysts Pt, Pd, Ru, Rh, Ni, or Cu at
100-400° and 1-50 bar H₂. The molar ratio of I with H₂ is 1:1 to
1:10.

If any fees are necessary in connection with this document, please charge Deposit
Account No. 02-0390, Baker & Daniels.

Respectfully submitted,


Robert C. Hyta
Registration No. 46,791
Attorney for Applicant

RCH:sc
BAKER & DANIELS
300 North Meridian Street, Suite 2700
Indianapolis, IN 46204
Telephone: (317) 237-0300
Facsimile: (317) 237-1000
Enclosure: Form PTO/SB/08A-B



RECEIVED
MAR 05 2002
1C 1700

CERTIFICATE OF MAILING (37 C.F.R. § 1.8(a))

I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the address above on the date indicated below.

February 11, 2002

By: _____

Stephanie Cox
Stephanie Cox

Please type a plus sign (+) inside this box → +

PTO/SB/08A (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet **1** of **3**

Complete if Known

| | |
|------------------------|---------------|
| Application Number | 09/966,158 |
| Filing Date | 09/28/2001 |
| First Named Inventor | Yuichi Iikubo |
| Group Art Unit | 1764 |
| Examiner Name | |
| Attorney Docket Number | GRLK-003 |

U.S. PATENT DOCUMENTS

| Examiner Initials [*] | Cite No. ¹ | U.S. Patent Document | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|-----------------------------------|--------------------------|----------------------|--------------------------------------|--|--|--|
| | | Number | Kind Code ² (if known) | | | |
| | 1 | 2,005,706 | | H.W. Daudt et al. | 06/18/1935 | |
| | 2 | 2,005,707 | | H. W. Daudt et al. | 06/18/1935 | |
| | 3 | 2,576,823 | | A. F. Benning et al. | 11/27/1951 | |
| | 4 | 2,697,124 | | R. M. Mantell et al. | 12/14/1954 | |
| | 5 | 2,900,423 | | L. B. Smith et al. | 08/18/1959 | |
| | 6 | 2,942,036 | | L. B. Smith et al. | 06/21/1960 | |
| | 7 | 3,258,500 | | F. W. Swamer et al. | 06/28/1966 | |
| | 8 | 3,436,430 | | L. E. Hall et al. | 04/01/1969 | |
| | 9 | 3,636,173 | | L. E. Gardner | 01/18/1972 | |
| | 10 | 3,803,241 | | I. Stolkin et al. | 04/09/1974 | |
| | 11 | 4,158,023 | | von Halasz | 06/12/1979 | |
| | 12 | 5,043,491 | | Webster et al. | 08/27/1991 | |
| | 13 | 5,057,634 | | Webster et al. | 10/15/1991 | |
| | 14 | 5,068,472 | | Webster et al. | 11/26/1991 | |
| | 15 | 5,068,473 | | Kellner et al. | 11/26/1991 | |
| | 16 | 5,146,018 | | Kellner et al. | 09/08/1992 | |
| | 17 | 5,171,901 | | Gassen et al. | 12/15/1992 | |
| | 18 | 5,177,273 | | Bruhnke et al. | 01/05/1993 | |
| | 19 | 5,220,083 | | Webster et al. | 06/15/1993 | |
| | 20 | 5,268,343 | | Hopp et al. | 12/07/1993 | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials [*] | Cite No. ¹ | Foreign Patent Document | | | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
|-----------------------------------|--------------------------|-------------------------|---------------------|--------------------------------------|--|--|--|----------------|
| | | Office ³ | Number ⁴ | Kind Code ⁵ (if known) | | | | |
| | 1 | CA | 1,162,511 | | von Halasz | 05/02/1991 | | |
| | 2 | CA | 2,081,813 | | Hopp | 10/30/1992 | | |
| | 3 | EP | 0 349 115 A1 | | E.I. DuPont De | 01/03/1990 | | |
| | 4 | EP | 0 434 407 A1 | | E.I. DuPont De | 06/26/1991 | | |
| | 5 | EP | 0 442 075 B1 | | Chemical Abstracts | 08/11/1993 | | |
| | 6 | EP | 0 539 989 A1 | | Hoechst Aktienges | 05/05/1993 | | |
| | 7 | WO | WO 91/05752 | | E.I. DuPont De | 05/02/1991 | | |
| | 8 | WO | WO 96/17813 | | E.I. DuPont De | 06/13/1996 | | |
| | 9 | WO | WO 98/50327 | | Imperial Chemical | 11/12/1998 | | |
| | 10 | WO | WO 99/26907 | | Imperial Chemical | 06/03/1999 | | |

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Complete if Known

| | |
|-------------------------------|---------------|
| Application Number | 09/966,158 |
| Filing Date | 09/28/2001 |
| First Named Inventor | Yuichi Iikubo |
| Group Art Unit | 1764 |
| Examiner Name | |
| Attorney Docket Number | GRLK-003 |

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

| | |
|------------|--|
| Date | |
| Considered | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box → +

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheets: 3 of 3

Complete if Known

| | |
|------------------------|--------------|
| Application Number | 09/966,158 |
| Filing Date | 09/28/2001 |
| First Named Inventor | Yuichi Ikubo |
| Group Art Unit | 1764 |
| Examiner Name | |
| Attorney Docket Number | GRLK-003 |

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

| Examiner Initials ¹ | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------------------|-----------------------|--|----------------|
| | 1 | HERBERT O. HOUSE, "CATALYTIC HYDROGENATION AND DEHYDROGENATION," MODERN SYNTHETIC REACTIONS, 2nd ed., THE BENJAMIN/CUMMINGS PUBLISHINGS COMPANY (Menlo Park, CA), p. 1/2, | |
| | 2 | DMITRII D. MOLDAVSKII, "TECHNOLOGY FOR THE PREPARATION OF PERFLUORO-ORGANIC COMPOUNDS," Journal of Fluorine Chemistry, Elsevier Science S.A. (Netherlands), Vol. 94 (No. 2), p. 157-167, (February 5, 1999). | |
| | 3 | J. KVICALA ET AL., "Preparation of Perhalogenated Chlorofluoropropanes by Halogen Exchange in the Liquid and Vapour Phases and Their Isomer Analyses by 19F NMR Spectroscopy," Journal of Fluorine Chemistry, Elsevier Sequoia (Netherlands), p. 155-175, (February 5, 1989). | |
| | 4 | F. J. METTILLE ET AL., "Methods for the Introductions of Hydrogen into Fluorinated Compounds," Fluorine Chemistry Reviews, 1st ed., Vol. 1 (No. 2), p. 315-358, (February 5, 1967). | |
| | 5 | DR. MARK D. CISNEROS ET AL., "An Integrated Approach to Achieve Low Environmental Impact in the Speical Hazards Fire Suppression Industry," Great Lakes Chemical Corporation (West Lafayette, Indiana), p. 1-8, | |
| | 6 | VIACHESLAV A. PETROV ET AL., "Isomerization of Halopolyfluoroalkanes by the Action of Aluminum Chlorofluoride," Journal of Fluorine Chemistry, Elsevier Science S.A. (Netherlands), p. 125-130, (February 5, 1998). | |
| | 7 | B. P. AGGARWAL ET AL., "Chlorination of Propane and Propylene and Pyrolysis of Perchloropropane," Petroleum & Hydrocarbons, Vol. 3 (No. 2), p. 69-72, (July 5, 1968). | |
| | 8 | ALBERT L. HENNE ET AL., "Fluorinated Derivatives of Propane and Propylene," p. 496-497, (March 5, 1946). | |
| | 9 | KIRK-OTHMER, "Encyclopedia of Chemical Technology," Cataysis, 3rd ed., John Wiley & Sones (New York), p. 16-18, | |
| | 10 | MILOS HUDLICKY, "Chemistry of Organic Fluorine Compounds," A Laboratory Manual with Comprehensive Literature Coverage, 2nd ed., Ellis Horwood (New York), p. 170-179, (February 8, 1992). | |
| | | | |

Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.